

REMARKS

Reconsideration of the present application is requested. Claims 1-22 are pending. Claims 1, 2, 3, 4, 6 and 7 have been amended. Claims 17-22 have been added.

DRAWINGS

The Examiner objects to the drawings under 37 CFR §1.83(a) because “the base clock signal,” as set forth in Claim 1 is not shown in the drawings.

In at least one example embodiment, the “base clock signal,” of claim 1 corresponds to the H-SYNC signal shown, for example, in FIG. 1. Although not limited to this example embodiment, because at least the H-SYNC signal constitutes the “base clock signal,” of claim 1, the drawings are fully in accordance with CFR §1.83(a). Withdrawal of this rejection is requested.

PRIOR ART REJECTIONS

REJECTION UNDER 35 U.S.C. §103

The Examiner rejects Claims 1, 4-6 and 12 under 35 U.S.C. §103(a) as allegedly unpatentable over Applicants’ Admitted Prior Art (“AAPA”), US Patent Publication No. 2002/0140661 (“Miyajima”) and US Patent Number 5,615,376 (“Ranganathan”). This rejection is respectfully traversed, especially in view of Claims 1-4, 6 and 7 as now amended.

The driving control circuit, included in the display device of claim 1, maintains driving for obtaining at least one of the clock signals other than the fastest clock signal while stopping driving of the clock signal generation circuit and driving of the driving circuits during an inaction period. In doing so, the

display device of claim 1 provides easier adjustment of shift timing for shifting from one scanning period to another with an inaction period interposed there between. Maintaining driving for obtaining at least one of the clock signals other than the fastest clock signal also enables reduction of power consumption while maintaining image display quality. These effects are not disclosed, suggested by or conceivable from AAPA, Miyajima, Ranganathan or a combination thereof.

Assuming *arguendo* AAPA, Miyajima and Ranganathan (collectively "the references") could be combined (which Applicants do not admit), the references do not render claim 1 *prima facie* obvious unless the combination of references teaches or suggests all features of claim 1. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); M.P.E.P. § 2143.03. Neither AAPA, Miyajima nor Ranganathan, taken singly or in combination, disclose or fairly suggest a "driving control circuit," configured to stop "driving of the clock signal generation circuit in the inaction period," while maintaining "driving for obtaining at least one of the clock signals other than the clock signal," as required by claim 1. Absent this feature, the combination of AAPA, Miyajima and Ranganathan does not render claim 1 *prima facie* obvious and the rejection should be withdrawn.

The Examiner correctly recognizes that neither AAPA nor Ranganathan teaches or suggests a driving control circuit for "stopping the driving of the driving circuits," as required by claim 1, and relies upon paragraph [0031] of

Miyajima to teach this feature. However, contrary to claim 1, Miyajima discloses no such driving control circuit.

According to Miyajima, a switch Hsw arranged between the H driver 220 and data lines 22 is switched off during a non-display period. *Miyajima* at [0031]. In doing so, the H driver 220 and the V driver 210 are electrically isolated from the data lines 22 and the gate lines 12, respectively, and the outputs of the V driver 210 and the H driver 220 are blocked. *Id.* By contrast, the driving control circuit of claim 1 actually stops the "driving of the driving circuits." Thus, contrary to the Examiner's assertion, the driving of the V driver 210 and the H driver 220 in Miyajima is never stopped, but instead the outputs from the drivers in Miyajima are merely prevented from reaching an intended destination (i.e., gate lines 12 or data lines 22). *Id.* at FIG. 1, [0031]. Therefore, even assuming *arguendo* AAPA, Miyajima and Ranganathan could be combined (which Applicants do not admit), the resultant combination still fails to disclose or fairly suggest all features of claim 1. For at least this reason, the Examiner's combination fails to render claim 1 obvious. *Royka*, 490 F.2d 981, 180 USPQ 580; M.P.E.P. § 2143.03.

The above notwithstanding, the combination of AAPA, Miyajima and Ranganathan also fails to teach or suggest at least, a driving control circuit that "stops driving of the clock signal generation circuit in the inaction period, in addition to stopping driving of the driving circuits, and maintains driving for obtaining at least one of the clock signals other than the clock signal," as required by claim 1.

Moreover, the Examiner admits that none of the references taken alone teach or suggest at least some features set forth in claim 1, but then contends that the combination of references teach the claimed features. *Office Action* at 4. However, without any teaching or suggestion of all features of claim 1, the Examiner's reference combination cannot render claim 1 *prima facie* obvious. *Royka*, 490 F.2d 981, 180 USPQ 580; M.P.E.P. § 2143.03. Therefore, the Examiner's rejection is deficient and should be withdrawn.

Furthermore, the Examiner alleges that AAPA shows the clock signals of Miyajima "can have different speeds." *Office Action* at 3. The Examiner therefore concludes that although the references individually teach the limitation as claimed, the combination of references does teach the features of claim 1. *Office Action* at 3.

Applicants disagree with the Examiner because the Examiner failed to properly establish why the clock speeds would be different given these reference teachings. That is, the Examiner has failed to establish that the prior art suggests the desirability of the display device of claim 1 including a "base clock signal," a "clock signal," and a "control clock signal," having different speeds. Because a *prima facie* case of obviousness for rejecting claim 1 is not established unless the Examiner provides some teaching, suggestion or motivation for the combination, and the Examiner has failed to establish a teaching, suggestion or motivation as to why the teachings of the references would (not could) suggest a display device having clock signals with different

speeds, the Examiner's rejection is deficient and should be withdrawn.

M.P.E.P. § 2143.

Moreover, the mere fact that references can be combined or modified in a particular manner does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Because the Examiner has merely set forth the possibility that clock signals may have different speeds, but not why the teachings of AAPA, Miyajima and Ranganathan would suggest a display device having clock signals with different speeds, a *prima facie* case rendering claim 1 obvious has not been established.

For at least the foregoing reasons, the rejection of claim 1 should be withdrawn. The rejection of claims 2-4, 6 and 7 should also be withdrawn for at least reasons somewhat similar to those set forth above with regard to claim 1.

FURTHER REJECTIONS UNDER 35 U.S.C. § 103(a)

The Examiner further rejects claims 2 and 7 under 35 U.S.C. §103(a) as being unpatentable over AAPA, Miyajima, Ranganathan and U.S. Patent No. 6,088,806 ("Chee"); and claims 3, 8-11 and 13-16 under 35 U.S.C. §103(a) as being unpatentable over AAPA, Miyajima, Ranganathan, Chee and U.S. Patent Publication No. 2002/0180673 ("Tsuda"). These rejections should be withdrawn because the Examiner's alleged combination of AAPA, Miyajima, Ranganathan, Chee and/or Tsuda is deficient for at least reasons somewhat similar to those previously set forth above.

NEW CLAIMS

Applicants have added new claims 17-22, which are also believed to be allowable over the prior art of record. Allowance of these new claims is requested.

CONCLUSION

In view of above remarks, reconsideration of the outstanding rejection and allowance of the pending claims is respectfully requested.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) hereby petition(s) for a one (1) month extension of time for filing a reply to the outstanding Office Action and submit the required \$120.00 extension fee herewith.

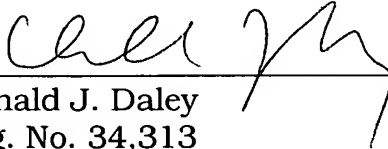
If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Andrew M. Waxman, Reg. No. 56,007, at the number of the undersigned listed below.


If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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